

CIRCULATING COPY
TO BE RETURNED TO REPORTS DESK

DOCUMENT OF INTERNATIONAL DEVELOPMENT ASSOCIATION

Not For Public Use

FILE COPY

Report No. P-1223a-SYR

REPORT AND RECOMMENDATION
OF THE
PRESIDENT
TO THE
EXECUTIVE DIRECTORS
ON A
PROPOSED CREDIT
TO
SYRIA
FOR A
WATER SUPPLY PROJECT

May 17, 1973

This report was prepared for official use only by the Bank Group. It may not be published, quoted or cited without Bank Group authorization. The Bank Group does not accept responsibility for the accuracy or completeness of the report.

CURRENCY EQUIVALENTS

Currency Unit - Syrian Pound (LS)

| | | | | |
|----------------|-------|---|--------------------|--------------------|
| Free Rate: | US\$1 | = | Syrian Pounds (LS) | 4.32 ^{1/} |
| Official Rate: | US\$1 | = | Syrian Pounds (LS) | 3.82 |
| Free Rate:1 | LS 1 | = | US\$0.23 | |
| Official Rate: | LS 1 | = | US\$0.26 | |

FISCAL YEAR: January 1 to December 31

^{1/} Since February 1973, the free rate of the Syrian pound has been
US\$1.00 = LS 4.05

INTERNATIONAL DEVELOPMENT ASSOCIATION

REPORT AND RECOMMENDATION OF THE PRESIDENT
TO THE EXECUTIVE DIRECTORS ON A
PROPOSED CREDIT TO SYRIA FOR A
WATER SUPPLY PROJECT

1. I submit the following report and recommendation on a proposed development credit to Syria for the equivalent of \$15 million on standard IDA terms to help finance a water supply project. The equivalent of US\$ 14.2 million out of the proceeds of the credit would be relent to Etablissement Public des Eaux de Figeih (EPEF) for 25 years, including 5 years of grace, with interest at 6 percent per annum to help finance the expansion of water supply in Damascus. The balance of \$0.8 million would be retained by the Government and help finance pollution control and sewerage studies.

PART I - THE ECONOMY

2. A report entitled "Current Economic Position and Prospects of Syria" was distributed in February 1972 to the Executive Directors. An economic mission visited Syria in October-November 1972 and its report has been distributed separately. A country data sheet is attached as Annex I.

3. Since the attainment of independence in 1946, Syria has had numerous changes in regime which resulted in a shift of power from groups of landowners, traders and industrialists to a rising class of technicians, officers, and civil servants, and a shift of the economy from a laissez faire system to a largely publicly owned and regulated one. The Baath Socialist Party -- the ruling party since 1963 -- has provided substantial continuity of emphasis on economic and social development policies, which have prevailed in spite of Government changes and external tensions. During the 1960's an agrarian reform was completed, with redistribution of land to large numbers of formerly landless peasants. In November 1970 President Assad came to power. His regime has been characterized by a balance of firmness, political moderation and economic pragmatism; search for a better defined role for the private sector in the centrally regulated economy; and improved economic relations with Western countries. Relaxation of administrative controls, decentralization of administrative responsibilities, import liberalization measures and guarantees to those repatriating funds have resulted in a marked improvement in the domestic political and business climate. In March 1973, a permanent constitution was approved by referendum, which provides for general elections of the legislature within 90 days and election of the President by national referendum for a seven-year term.

4. Syria's rapidly growing population requires accelerated development of the country's land and water resources. Only about one third of the country's 8.8 million ha of cultivable land is planted in any one year and about one fourth of 2 million ha of irrigable land is irrigated. Apart from

some oil and low grade phosphates, no other significant and exploitable mineral resources are known. Proven oil reserves are of the order of 300 million tons, not including recently discovered fields.

5. In the last decade, diversification of production and rapid growth were achieved under fairly stable prices. GDP increased in 1960-72 by about 7 percent per year in real terms, compared to 3.4 percent during 1953-60. The most dynamic sectors were manufacturing, transport, communications and services during the whole decade, agriculture in the early 1960's, and oil production and oil transit during the late 1960's. Industry has also grown rapidly, its value added increasing by about 10 percent per year and its share of GDP rising from 17 percent in 1966 to 19 percent in 1971. Agriculture, mainly rain-fed cotton and cereals, remains however the most important sector of the economy. Although its share of GDP declined from 25 percent in 1966 to 20 percent in 1971, it still employs nearly two-thirds of the labor force and accounts for two-thirds of exports. Wide fluctuations in agricultural production primarily caused by variations in rainfall are a major unsettling factor in growth; agricultural production stagnated in the second half of the nineteen-sixties and had a 26 percent increase in 1972. A substantial increase in oil transit rates in 1971, new factories entering into production in 1972, and an improved business climate, also contributed to a GDP increase of about 13 percent annually in real terms in 1971 and 1972.

6. Apart from military expenditures, which are related to the conditions in the region, resource allocation has been consistent with the priority needs of the economy, and a large public investment effort has been a main factor of dynamism. Total investment grew by about 9 percent per year over the last decade, rising to about 13 percent per year in the second half, with public investment accelerating to 17.5 percent and compensating for the slowdown of private investment after nationalizations. In 1971, private investment jumped by 30 percent as a result of import liberalization measures and total investment increased by 19 percent, reaching 17 percent of GDP. Measures have been taken to strengthen the country's infrastructure, expand its industrial basis, and develop its limited petroleum and mineral resources. Agriculture, irrigation and land reclamation received about 18 percent of public investment in 1960-1970, and the construction of a dam at Tabqa on the Euphrates set the basis for lessening the dependence of agriculture on weather conditions through irrigation.

7. In spite of continued austerity of non-military current public expenditure, public revenues were insufficient to meet both the increasing defense burden after 1967 and the requirements of a large investment program. Taxes remained low, averaging about 10.2 percent of GDP in 1966-71. Constant public salaries since the mid-sixties and redistribution of wealth have lowered the taxable base. In 1969, the Government took several measures to improve tax assessment and collection and increased somewhat the rates for profit taxes. There is still some scope for structural improvements in the

tax system. Savings of public enterprises rose substantially, especially in oil and banking, partly offsetting the increase in the current budget deficit, and financed an increasing part of public investment. However, with modest gross national savings and with low net external financing, domestic borrowing from the banking system, mainly from the Central Bank, increased considerably, to finance the current budget deficit as well as part of investments. Extensive and effective price controls, a preference for currency hoarding since 1967, increasing monetization of the economy and some capital flight, a fast growth of commodity imports and running down of foreign assets contained the inflationary effects of high liquidity in the economy. The retail price index increased by only 3 percent per year in the nineteen sixties. In 1970, the Government took measures to encourage private savings and limit credit expansion, including higher interest on deposits, saving certificate issues and restrictions on credit overdrafts. As a result, the growth rate of money supply decelerated to 6.4 percent in 1971 (compared to 15 percent per year during 1966-70) and demand deposits increased by 19 percent.

8. After a period of small overall surpluses, the balance of payments has been in deficit and net foreign assets declined every year since 1968. In 1966-1971, imports grew at an average annual rate of about 9 percent and exports by about 3.5 percent. In spite of rapidly growing exports of petroleum, the trade deficit increased due to the stagnation of other exports and to a rapid increase of food imports, both due to particularly adverse weather conditions, and to increase of import requirements of capital and intermediate goods. The increasing trade deficits were only partly offset by rising receipts from services, mainly oil pipeline dues representing 28 percent of total export earnings in 1971. Recent liberalization policies and devaluation of the Syrian pound have resulted in capital repatriation and a better investment climate in the private sector. In 1971, the Government liberalized imports requirements, essentially by permitting their financing by use of Syrian foreign exchange holdings abroad. Most external transactions were shifted from the official rate (LS 3.82=US\$ 1) to a free market rate (LS 4.32=US\$ 1) and the earlier parity with the dollar was maintained after the currency realignments of December 1971.^{1/} In 1972, exports increased substantially (particularly wheat, petroleum and textiles) due to a record harvest and the 1971 currency realignment. There was also a marked increase in official grants from Arab countries (\$42 million during January-September 1972 compared with \$21 million in 1971), and a jump in net private capital inflow (from \$1 million in 1970 to \$75 million in 1971 and \$23 million in January-September 1972). However, because of fast growing imports due to liberalization and delayed payments of oil transit dues after the 1972 nationalization of the Iraq Petroleum Co. (IPC) pipeline, net reserves deteriorated.

^{1/} Since February 1973, the free rate has been LS4.05 = US\$1.

9. Employment problems remain serious, as growth of direct employment opportunities has been limited by the low labor requirements of the oil sector and other industries and the long gestation of most public investments. Employment in industry stagnated between 1966 and 1971 and employment in Government and services increased by only 2 percent per year, compared with a 3.3 percent increase of population and 3 percent of active population. Emigration, particularly to Lebanon, provided a limited relief and agriculture absorbed most of the increase of active population. Although official estimates indicate open unemployment at only 4.3 percent, a decrease of productivity in agriculture during the last decade points to increasing under-employment.

10. Good export and production prospects indicate that it is possible for Syria to achieve the Third Plan targets of 8.2 percent GDP growth per year in 1971-75, and a total investment (LS 8 billion) double the amount of the Second Plan. In the longer term, the Government's continued emphasis on investment should make it possible to sustain a 7 percent annual growth. Prospects for continuing fast growth in oil, manufacturing and electricity are favorable and growth in private investment may well continue. The recent liberalization measures and the ambitious investment program are likely to result in 9 percent import growth per year. Following the devaluation of the Syrian pound in 1971 and the agreement Syria has reached with Iraq in 1973 on increased oil transit dues, exports of goods and non-factor services can be expected to grow by over 10 percent per year. Surpluses in public enterprises can be expected at least to double over the Second Plan period, mainly due to rising oil production, higher transit dues and the growing contribution of banking. With the recent improvements in taxation and the expected fast growth of production and exports, tax revenues should rise above the low 1971 levels. Therefore, a substantial improvement of the savings rate is feasible, barring major crises.

11. Syria, however, will require more external aid, technical assistance and guidance on institution building than it can obtain from its present sources, if it is to reach the above targets. The bulk of Syria's external borrowing was concentrated in 1965-67, with gross official capital inflows averaging some \$55 million per year since 1965 and a peak of almost \$80 million in 1967. Reported external debt outstanding and disbursed increased from an estimated \$100 million in 1963 to about \$230 million at the end of 1971. Debt including undisbursed has risen from about \$258 million at the end of 1970 to \$325 million at the end of 1971, of which debt outstanding to Governments amounted to \$273 million, mainly to USSR, East Germany, Kuwait, Czechoslovakia and Saudi Arabia. Suppliers' credits dropped from 16.6 percent of total debt outstanding (including undisbursed) in 1970 to 13.6 percent in 1971. IDA disbursements amounted to \$7.2 million at the end of January, 1973. Commitments increased substantially in 1971, mainly from East Germany, Kuwait, USSR and Japan. The average borrowing terms have improved from 9.7 years maturity, 2.8 years grace and 3.3 percent interest in 1967 to 14.3 years maturity, 4.1 years grace and 3.1 percent interest in 1971. Owing to the relatively short maturity periods on earlier debts and concentration

of borrowing in the mid-sixties, debt repayments, fluctuating between \$25 million in 1967 and \$51 million in 1969, offset a large part of the gross inflow, and over half of outstanding debt is to be repaid during 1972-76. Debt service payments, excluding any possible military debts, about which information is not available, amounted in 1971 to \$49 million, or 13.3 percent of exports of goods and services, and remained at about the same level in 1972 but are expected to fall to around 10 percent by 1973.

12. Requirements of gross official external assistance are expected to rise from about \$50 million in 1971 to about \$80 million in 1975 and average about \$100 million a year thereafter. Existing sources of external assistance are expected to continue lending at present levels, and the balance will have to be found from multilateral and new bilateral sources. The debt repayment burden appears manageable assuming that the recently improved terms obtained from existing bilateral sources of lending continue to be available and that substantial assistance will be on concessional terms, such as Syria now receives from East Germany, China and IDA.

13. Syria's recent growth with substantial price stability, improved export prospects and generally favorable outlook for further growth, adequate public investment planning and recent improvement in economic management with the devaluation and liberalization measures, indicate satisfactory performance. The projected debt service burden permits some additional borrowing on conventional terms. However, production and foreign exchange earnings are still dependent on widely fluctuating weather conditions, and prospects of receipts for oil transit after 1975, when the existing agreement with Iraq expires, are unknown at this stage. Substantial inflows of private capital and Arab grants are a recent phenomenon, and their future level may fall with changing political conditions. Given these uncertainties, a per capita income of only about \$270, growing underemployment problems and negative net foreign exchange reserves, Syria should seek to obtain a substantial share of its external capital on concessionary terms and qualifies for IDA assistance, as well as for some Bank lending.

14. Following Iraq's nationalization of the facilities of the Iraq Petroleum Company (IPC), Syria nationalized the section of the pipeline running through its territory, in June 1972, with a provision for compensation. However, no negotiations took place on this matter, pending the settlement of the compensation issue between Iraq and the IPC. In January, 1973, Syria and Iraq reached an agreement on new transit rates. On February 28, 1973, Iraq and IPC signed an agreement on compensation for the nationalization of IPC facilities, and it should now be possible for compensation negotiations between Syria and IPC to take place. We will follow developments on this matter closely.

PART II - BANK GROUP OPERATIONS

15. Syria has to date received two IDA credits, both for highways, totalling \$22.3 million. The first operation, amounting to \$8.5 million, was in 1963, and the second, amounting to \$13.8 million, was signed in April 1972. The first highway project is about to be completed satisfactorily, although it had a slow start. The credit for the second highways project became effective in February 1973. Though Syria is a member of the corporation, IFC has made no investments there in the past. Annex II contains a summary statement of IDA credits as of April 30, 1973, and notes on the execution of on-going projects.

16. The Government's increased emphasis on sound economic management provides the Bank Group with an appropriate setting to make a meaningful contribution to economic development. Syria's relatively developed administrative structure, adequate public investment planning and increasing interest in cooperating with the Bank Group should make it possible for it to absorb larger amounts of IDA and Bank financing than in the past. In line with the needs of the economy and the Third Plan investment strategy, the Bank Group will focus on: (i) irrigation and soil improvement in the Euphrates basin, to increase agricultural employment, production and exports while reducing food imports, and the dependency on weather fluctuations; (ii) water supply, sewerage, transportation and power projects of high priority; and (iii) rural development and family planning schemes.

17. Project preparation is well advanced for a power loan in FY74 following the proposed water supply credit. The Bank Group is participating in the study of a first irrigation project in the Euphrates Valley and in preparing urgently needed projects for drainage in the lower Euphrates, which are likely to result in lending operations in FY 74 and FY 75, respectively. The development of the Euphrates Valley over a forty-year period is expected to quadruple the country's installed power capacity, reduce the dependence of the economy on rainfall fluctuations by doubling the area of the country's irrigated land, reduce underemployment and permit the urgent resettlement of people displaced by the building of the Tabqa Dam. In view of the simultaneous construction of two large dams on the Euphrates in Turkey and Syria, technical discussions have been taking place in the last few months between Turkey, Syria and Iraq to regulate the flows of the Euphrates during the filling period of the two dams.

PART III - WATER SUPPLY AND POLLUTION CONTROL IN SYRIA

18. About one-third of Syria's 6.2 million population live in the four largest cities of Damascus, Aleppo, Homs and Hama, around which most manufacturing plants are located. Migration from rural areas, comparatively

higher fertility rates and lower mortality rates than in the rest of the country have resulted in growth of urban population ranging between 4 and 6 per cent annually, substantially higher than the national average of about 3.3 percent. Damascus, the country's capital and one of the oldest continuously inhabited cities in the world, has one million people and is experiencing a population growth of 5 percent a year. While Aleppo, Homs and Hama have recently embarked on expansion schemes to meet the growing demand for water, Damascus has had no major water supply expansion over the last forty years.

19. Since the time of ancient Rome, Damascus has used an abundant supply of high quality water at low cost from a spring in the neighboring hills (Figh Springs). The city's potable water system has a comparatively large number of individual water connections and serves 80 percent of the population. The rest is served by public taps. Per capita consumption, at about 110 litres per day, is not high. Demand for water is expected to grow at about 6 percent per year until 1985 and 5 percent thereafter, mostly as a result of population growth in the city and a modest increase of per capita consumption. In recent years, the capacity of the transmission system has been barely sufficient to meet peak demand, and dry season shortages and restrictions were experienced in 1971 and 1972. In addition, the yield of the Figh Spring has fallen to alarmingly low levels during drought years. Water shortages will become more serious, unless production and transmission facilities are expanded.

20. Urbanization and industrial activity have created serious pollution problems affecting populated areas of Syria, and gastrointestinal diseases related to polluted water resources and lack of sanitation are considered the most prevalent causes of debility and morbidity. Fairly adequate sewer networks exist in the major cities of Aleppo, Homs and Hama, but the centuries-old system of Damascus is inadequate. None of these cities nor any large industries have sewage treatment plants, and their discharge into rivers, with relatively small dry weather flow, causes pollution of water used for irrigation, industries and towns. Pollution problems are especially serious in the Orontes river basin, where almost one million people live and where the industrial towns of Homs and Hama are located, and in the basin of the Barada River, which receives sewage from Damascus.

21. The Government has become increasingly aware of these problems and, in 1972, made a start towards creating a Pollution Control Department. The Department has prepared draft legislation for regulating discharge of industrial waste and is considering measures to control waste discharges, however, progress is hampered by shortage of financial resources and scarce engineering skills.

PART IV - THE PROJECT

22. A report entitled "Syria: Appraisal of the Damascus Water Supply Project" (No. 106a - SYR dated May 14, 1973) is being distributed separately. The main features of the project are summarized in Annex III.

23. During the nineteen sixties Etablissement Public des Eaux de Fiegh (EPEF) became increasingly aware that the demand for water was approaching the capacity of the Damascus system, and commissioned studies for its expansion. SOGREAH--Societe Grenobloise d'Etudes et de Applications Hydrauliques (France)--prepared a study on the hydrology of the spring and its possible development, as well as feasibility studies for source development, transmission facilities and storage. SEURECA--Societe d'Etudes pour l'Urbanisme, l'Equipement et les Canalisations (France)--prepared a master plan, based on an urban plan for 1984, for the expansion of the distribution network and a feasibility study for distribution works in 1973-77.

24. In 1971 the Government requested assistance from IDA for a project based on these studies to expand the water supply system of Damascus. A sector reconnaissance mission visited Syria in August 1971, and preappraisal missions in March and September 1972. In the meantime, the Government also requested assistance in financing studies on wastewater disposal for Damascus, on sewage treatment plants for Homs and Hama, and on pollution control in the basins of the Orontes and Barada rivers.

25. The proposed project was appraised in November-December 1972. Negotiations for the proposed credit were held in Washington in April 1973. The Syrian Government was represented by Mr. Abdel-Razzak Abdel-Baki, Minister of Rural and Municipal Affairs, and Mr. Mohamed Al Amir, Vice Minister. EPEF was represented by Mr. Rida Mourtada, General Manager.

26. The project, whose construction is scheduled from 1973 through mid-1977, would (i) increase the quantity of water available from the Fiegh Spring through construction of an underground cut-off wall and pumping; (ii) increase transmission capacity by construction of a 15-km tunnel from the spring to the city; (iii) expand the storage and distribution system and replace the older parts of the distribution network; (iv) improve leak detection and metering; (v) train EPEF staff in management and engineering; and (vi) finance water pollution and sewerage studies which include preliminary engineering for treatment facilities in the Homs/Hama area, and engineering for the first stage of construction of sewerage system and treatment facilities at Damascus, as parts of master plans for pollution control in the basins of the Orontes and Barada rivers. Appropriate safeguards are included to protect the ground water source of Damascus from pollution.

Project Management

27. EPEF was created as a governmental utility in 1958. Although administratively attached to the Ministry of Municipal and Rural Affairs, EPEF operates autonomously in day to day operations, has its own assets, and prepares its budget. The General Manager, appointed by the Government, is responsible for all managerial and administrative functions. Although it is reasonably well managed, EPEF has not in the past felt pressed to husband the supply of water, which was abundant compared to demand. As a result, flow measurement and recording have been perfunctory, numerous leaking mains are suspected, and meters are in disrepair.

28. EPEF realizes that these matters now require improvement, and has undertaken to (i) submit and carry out a program acceptable to IDA to reduce water losses (ii) introduce immediate improvements in its accounting and audit, and commission a study for the improvement of its organization and operating procedures, in line with the expected expansion of its operations; (iii) create a project unit to supervise implementation of the proposed program; and (iv) engage consultants acceptable to IDA to assist in contract administration and construction supervision for the source development, tunnel, terminal reservoirs and telecommunications, and to finalize designs, prepare tender documents and supervise construction for the distribution system.

29. Concerning the water pollution studies, the Government will create in the Ministry of Municipal and Rural Affairs a special unit which would work closely with the consultants in carrying out the studies to be financed under the audit and maintain liaison with municipalities and industries in the river basins. It might eventually be responsible for implementing the recommendations resulting from the studies. The establishment of this unit is a condition for disbursement of the portion of the proposed credit that is to be used for pollution control studies.

Project Cost and Financial Results

30. Total project cost is estimated at US\$32.6 million equivalent, including US\$1.0 million equivalent for the pollution control studies. The proposed credit for \$15 million would finance most of the estimated foreign exchange cost of \$17.8 million. The rest of the foreign exchange cost is represented by equipment previously purchased by EPEF without international competitive bidding. The amount of the credit relented by the Government to EPEF will finance about 45 percent of the cost of the water supply component. About 30 percent of this cost would be financed from internally generated funds of EPEF and 25 percent from a contribution from the Government's central investment pool embodying the accumulated cash surpluses of state agencies, toward which in past years EPEF has contributed a substantial part of the funds now needed.

31. EPEF's financial position is sound and is expected to remain so. The rate of return on average net fixed assets in operation has increased from 8.4 percent in 1969 to 12.7 percent in 1972. The large, "lumpy" investments now required will, however, greatly inflate EPEF's presently small rate base as well as increase operating expenses considerably. Annual depreciation, for example, will triple over the next ten years. If tariffs remained unchanged, operating expenses would overtake annual revenues by 1976. EPEF has agreed to modify tariffs as necessary, in order to: (i) ensure that ordinary annual revenues cover operating expenses (including depreciation and interest) at all times; and (ii) produce a rate of return gradually rising during the years after project completion to reach 7-1/2 % in 1982 and thereafter. These provisions are adequate to assure EPEF's financial viability. They would on the basis of present financial projections require a rate increase from LS 0.20/m³ to LS 0.27/m³ in 1975, and a further increase to LS 0.30/m³ in 1982.

32. EPEF's debt service coverage is projected to be satisfactory, at 2.1 when amortization of the Government loan begins in 1978 and 2.7 by 1982. EPEF has agreed not to undertake any medium- or long-term debt without the Bank's prior approval, unless EPEF's net revenues cover debt service at least 1.5 times.

Procurement

33. Goods financed by the proposed credit would be procured through international competitive bidding, except for tools and equipment costing less than \$5,000 and limited in total to \$50,000. It is expected that virtually all large civil works contracts -- including most of those for the installation of distribution pipes -- and equipment supply contracts will be awarded to foreign firms.

Disbursement

34. Disbursement would be made against:

- (i) The CIF cost of imported equipment and the ex-factory cost of locally produced equipment.
- (ii) The foreign exchange costs of consultants and training; and
- (iii) Fifty-five percent of all civil works contracts, representing the estimated foreign exchange component.

It is proposed that up to \$200,000 be reimbursed retroactively to the EPEF from the proposed credit for expenditures on engineering consulting services incurred from July 31, 1972 in preparing technical and feasibility studies for the water supply project. The estimated schedule of disbursements is shown in Annex III.

Economic Justification

35. The project is technically sound and economically justified. The proposed water supply component represents the least-cost solution. The rate of return based on incremental water sales is 12 percent, but understates the economic return on the project, because benefits to public health and better fire protection are not fully reflected in the price paid by the consumer. Without the project, EPEF would have to refuse to make new connections and water shortages would increase. The proposed pollution control studies are a necessary prerequisite to the reduction of health hazards and environmental nuisances in densely populated areas, with a positive impact on reduction of morbidity and increase in work productivity.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

36. The draft Development Credit Agreement between the Syrian Arab Republic and the Association, the draft Project Agreement between the Association and the Etablissement Public des Eaux de Figeh, the Recommendation of the Committee provided for in Article V, Section 1 (d) of the Articles of Agreement and the text of a Resolution approving the proposed Development Credit are being distributed to the Executive Directors separately. Ratification of the Development Credit Agreement by the legislature is required under the laws of the Syrian Arab Republic and, owing to the lengthy legislative process involved, a period of six months has been allowed after the date of signature for the fulfillment of the conditions of effectiveness. Otherwise, the draft agreements conform to the usual patterns for water supply projects.

37. I am satisfied that the proposed Development Credit would comply with the Articles of Agreement of the Association.

PART VI - RECOMMENDATION

38. I recommend that the Executive Directors approve the proposed Development Credit.

Robert S. McNamara
President

By J. Burke Knapp

Attachments
May 17, 1973

COUNTRY DATA - (SYRIA)

| <u>MONEY, CREDIT and PRICES</u> | <u>1965</u> | <u>1969</u> | <u>1970</u> | <u>1971</u> | <u>August</u> | |
|--|--------------------|---------------------|-------------|-------------------------|---------------|-------------|
| | | | | | <u>1971</u> | <u>1972</u> |
| | | (Million LS | | outstanding end period) | | |
| Money and Quasi Money | 1322 ^{1/} | 2214 | 2521 | 2703 | 2562 | 3058 |
| Bank Credit to Public Sector | 1071 ^{1/} | 2761 | 3331 | 3878 | .. | .. |
| Bank Credit to Private Sector | 984 ^{1/} | 596 | 533 | 588 | 644 | 633 |
| (Percentages or Index Numbers) | | | | | | |
| Money and Quasi Money as % of GDP | 30.0 | 35.5 | 39.2 | 35.7 | . | . |
| General Price Index (1963 = 100) ^{2/} | 102 | 116 | 121 | 127 | 121 | 126 |
| Annual percentage changes in: | | | | | | |
| General Price Index | | 3.3 ^{1/} | 4.3 | 4.8 | | 4.0 |
| Bank credit to Public Sector | | 26.8 ^{1/} | 20.6 | 16.4 | | |
| Bank credit to Private Sector | | -11.9 ^{1/} | -10.6 | 10.3 | | -1.7 |

BALANCE OF PAYMENTS

| | <u>1969</u> | <u>1970</u> | <u>1971</u> |
|--|------------------|-------------|-------------|
| | (Millions US \$) | | |
| Exports of Goods, NFS | 309 | 308 | 346 |
| Imports of Goods, NFS | 399 | 403 | 454 |
| Resource Gap (deficit = -) | -90 | -95 | -108 |
| Interest Payments (net) | -3 | -3 | -2 |
| Workers' Remittances | 24 | 19 | 22 |
| Other Factor Payments (net) | - | - | - |
| Net Transfers | 8 | 3 | 21 |
| Balance on Current Account | -61 | -76 | -67 |
| Direct Foreign Investment | - | - | - |
| Net MLT Borrowing | 7 | 9 | 6 |
| Disbursements | (58) | (42) | (52) |
| Amortization | (51) | (33) | (46) |
| Subtotal | 7 | 9 | 6 |
| Capital Grants | 10 | 7 | 8 |
| Other Capital (net) | -4 | 1 | 75 |
| Other items n.e.i | 17 | 7 | -42 |
| Increase in Reserves (+) ^{4/} | -32 | -52 | -20 |
| Gross Reserves (end year) | 97 | 83 | 108 |
| Net Reserves (end year) | 17 | -28 | -43 |

MERCHANDISE EXPORTS (AVERAGE 1969-71)

| | <u>US \$ Mln</u> | <u>%</u> |
|-----------|------------------|----------|
| Cotton | 81 | 40.9 |
| Petroleum | 34 | 17.1 |
| Textiles | 19 | 9.6 |
| Others | 64 | 32.4 |
| Total | 198 | 100.0 |

EXTERNAL DEBT, DECEMBER 31, 1971

| | <u>US \$ Mln</u> |
|---|------------------|
| Public Debt, incl. guaranteed | 325.5 |
| Non-Guaranteed Private Debt | - |
| Total outstanding including undischursed | 325.5 |
| <u>DEBT SERVICE RATIO for 1971^{3/}</u> | |
| | <u>%</u> |
| Public Debt, incl. guaranteed | 13.3 |
| Non-Guaranteed Private Debt | - |
| Total | 13.3 |

RATE OF EXCHANGE

Prior to February 1973

| |
|---------------------------------|
| US \$ 1.00 = 3.82 LS (official) |
| = 4.32 LS (free market) |
| SL 1.00 = US \$ 0.26 (official) |
| = US \$ 0.23 (free market) |

IBRD/IDA LENDING, (April 30, 1973) (Million US\$) ^{5/}

| | <u>IBRD</u> | <u>IDA</u> |
|--------------------------------|-------------|------------|
| Outstanding & Disbursed | -- | 7.2 |
| Undischursed | -- | 15.1 |
| Outstanding incl. Undischursed | -- | 22.3 |

The free rate has been US\$1 = LS 4.05 since February 1973.

- ^{1/} Not strictly comparable to the following series because of nationalization between 1966 and 1969.
^{2/} Retail price index in Damascus.
^{3/} Ratio of Debt Service to total exports.
^{4/} Including SDR allocation (6 in 1970 and 5 in 1971).
^{5/} Not including exchange adjustment.

STATUS OF BANK GROUP OPERATIONS IN SYRIA

A. STATEMENTS OF IDA CREDITS
(as of March 31, 1973)

| <u>Credit Number</u> | <u>Year</u> | <u>Borrower</u> | <u>Purpose</u> | <u>US\$ million</u> | |
|-------------------------------------|-------------|----------------------|----------------|----------------------|--------------------------|
| | | | | <u>Credit Amount</u> | <u>Undis- bursed</u> |
| 46 | 1963 | Syrian Arab Republic | Highways | 8.5 | 1.3 |
| 298 | 1972 | Syrian Arab Republic | Highways | <u>13.8</u> | <u>13.8</u> |
| Total now outstanding ^{/1} | | | | 22.3 | 15.1 |

B. STATEMENTS OF IFC INVESTMENTS: none
(as of April 30, 1973)

C. PROJECTS IN EXECUTION^{/2}

Credit No. 46 - First Highway Project

This project includes improvements of the 530 km Damascus-Homs-Hama-Aleppo-Raqqa highway linking the capital city with the country's major productive centers. Construction started only in 1968 because of inadequate engineering studies and the need for a complete redesign of the highway. Works are now well underway and are expected to be completed by late 1973. The original closing date (December 31, 1968) has been postponed to December 31, 1973.

Credit No. 298 - Second Highway Project

This project includes improvement and construction of 153 km of roads, linking Damascus with the Lebanese and Jordanian borders. The credit became effective in February 1973, after the establishment of a central maintenance department in the Ministry of Communications. Project preparation progressed as scheduled and construction is expected to start by late 1973 as envisaged during appraisal.

1/ Before exchange adjustments.

2/ These notes are designed to inform the Executive Directors regarding the progress of projects in execution, and in particular to report any problems which are being encountered, and the action being taken to remedy them. They should be read in this sense, and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.

SYRIA - WATER SUPPLY PROJECT

DEVELOPMENT CREDIT AND PROJECT SUMMARY

BORROWER: Syrian Arab Republic

AMOUNT: US\$ 15.0 million equivalent.

TERMS: Standard

RELENDING TERMS: The equivalent of \$14.2 million would be relent to Etablissement Public des Eaux de Figeh (EPEF) for 25 years, including 5 years of grace, with interest at 6 percent per annum. (\$0.8 million would be used by the Government for studies.)

PROJECT DESCRIPTION: The project includes:

Damascus Water Supply

- (i) An underground cutoff wall to increase the available flow and structures to prevent pollution from surface water at Figeh spring;
- (ii) Test pumping at Figeh to determine the storage characteristics of the aquifer and the maximum reliable yield which can be developed by pumping from the aquifer;
- (iii) A 15 km tunnel from Figeh to Damascus;
- (iv) Reservoirs with a total capacity of about 75,000 m³;
- (v) Construction of a new pumping station and renovation of the existing pumping stations, including equipment for pumping control.
- (vi) Installation of about 530 km of water mains in the distribution system;
- (vii) Meter testing equipment, flow and pressure metering apparatus and other equipment to assist in the operation and maintenance of the distribution system;

- (viii) Training for EPEF staff in management and engineering.
- (ix) Engineering and management consulting services.

Water Pollution Control and Sewerage Studies

- (i) Studies of measures to reduce pollution in the Barada and Orontes River basins, including the sewerage of Damascus and engineering for treatment plants in the Homs/Hama area.
- (ii) Training for Syrian staff.
- (iii) Purchase of equipment for monitoring water quality.

PROJECT EXECUTION:

EPEF will be responsible for the execution of the Damascus water supply component of the project, through a project unit.

The Government will be responsible for the execution of the water pollution control and sewerage studies, through a special unit in the Ministry of Rural and Municipal Affairs.

ESTIMATED COST:

| <u>Damascus Water Supply</u> | <u>Local</u> | <u>Foreign</u> | <u>Total</u> | <u>% of</u> |
|----------------------------------|----------------------|----------------|---------------|------------------|
| | -----US\$ (000)----- | | | <u>Component</u> |
| | | | | <u>Total</u> |
| Source Development | 620 | 1,050 | 1,670 | 5 |
| Tunnel | 1,872 | 2,875 | 4,747 | 15 |
| Reservoirs | 1,350 | 1,400 | 2,750 | 9 |
| Pumping Stations | 88 | 110 | 198 | 1 |
| Telecommunications | 27 | 163 | 190 | 1 |
| Pipelines | 3,775 | 6,525 | 10,300 | 33 |
| Equipment | 30 | 200 | 230 | 1 |
| Consultants | 475 | 925 | 1,400 | 4 |
| Land | 2,190 | - | 2,190 | 7 |
| Training | 50 | 75 | 125 | - |
| Sub-Total | 10,477 | 13,323 | 23,800 | 76 |
| Physical Contingencies | 1,875 | 1,700 | 3,575 | 11 |
| Price Increases | 2,198 | 2,002 | 4,200 | 13 |
| Total (Part A) | <u>14,550</u> | <u>17,025</u> | <u>31,575</u> | <u>100</u> |
| <u>Pollution Control Studies</u> | | | | |
| Equipment | 20 | 20 | 40 | 4 |
| Consultants | 160 | 740 | 900 | 90 |
| Training | 20 | 40 | 60 | 6 |
| Total (Part B) | <u>200</u> | <u>800</u> | <u>1,000</u> | <u>100</u> |
| <u>TOTAL PROJECT COSTS</u> | <u>14,750</u> | <u>17,825</u> | <u>32,575</u> | |

FINANCING PLAN:

| | <u>Water Supply</u> | | <u>Pollution Control</u> | | <u>Total</u> | |
|---------------------|---------------------|------------|--------------------------|------------|---------------------|------------|
| | <u>Component</u> | | <u>Studies</u> | | | |
| | <u>US\$ million</u> | <u>%</u> | <u>US\$ million</u> | <u>%</u> | <u>US\$ million</u> | <u>%</u> |
| Proposed IDA Credit | 14.2 | 45 | 0.8 | 80 | 15.0 | 46 |
| Government/EPEF | 17.4 | 55 | 0.2 | 20 | 17.6 | 54 |
| Resources | <u>31.6</u> | <u>100</u> | <u>1.0</u> | <u>100</u> | <u>32.6</u> | <u>100</u> |

ESTIMATED DISBURSEMENTS:

(\$ millions by fiscal year)

| 1973 | 1974 | 1975 | 1976 | 1977 |
|------|------|------|------|------|
| 0.35 | 3.81 | 4.81 | 4.13 | 1.90 |

PROCUREMENT ARRANGEMENTS:

All items financed by the Association, except for minor items of equipment, will be subject to international competitive bidding. Up to \$200,000 for foreign exchange expenditures on consultants' services for the Damascus water supply project, incurred since July 31, 1972 would be reimbursed retroactively to EPEF.

CONSULTANTS:

Damascus Water Supply

- Societe Grenobloise d'Etudes et d'Applications Hydrauliques. SOGREAH (France): feasibility studies final designs and tender documents for source development, tunnel between the source and Damascus, and terminal reservoirs.
- Societe d'Etudes pour l'Urbanisme, l'Equipement et les Canalisations. SEURECA (France): final designs and tender documents for distribution network.
- Contracts to be awarded: (i) design and construction supervision of minor reservoirs; (ii) supervision of construction for source improvement, tunnel and terminal reservoirs; (iii) supervision of construction of distribution network.

Water Pollution Control Studies

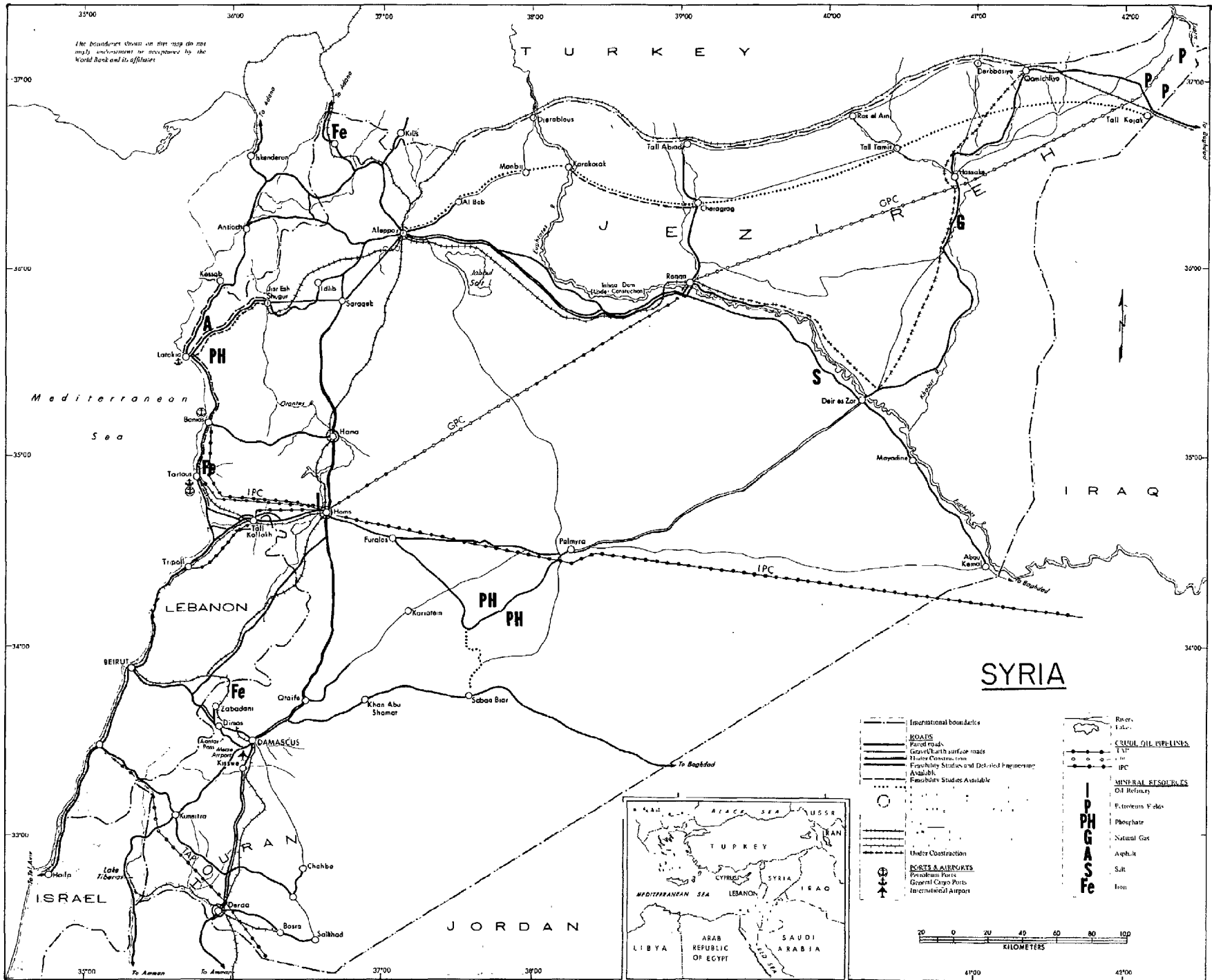
Contract to be awarded: study of measures to control pollution in the Barada and Orontes rivers; engineering for treatment facilities in the Homs/Hama area; and engineering for the first stage of development of the sewerage system and treatment facilities of Damascus.

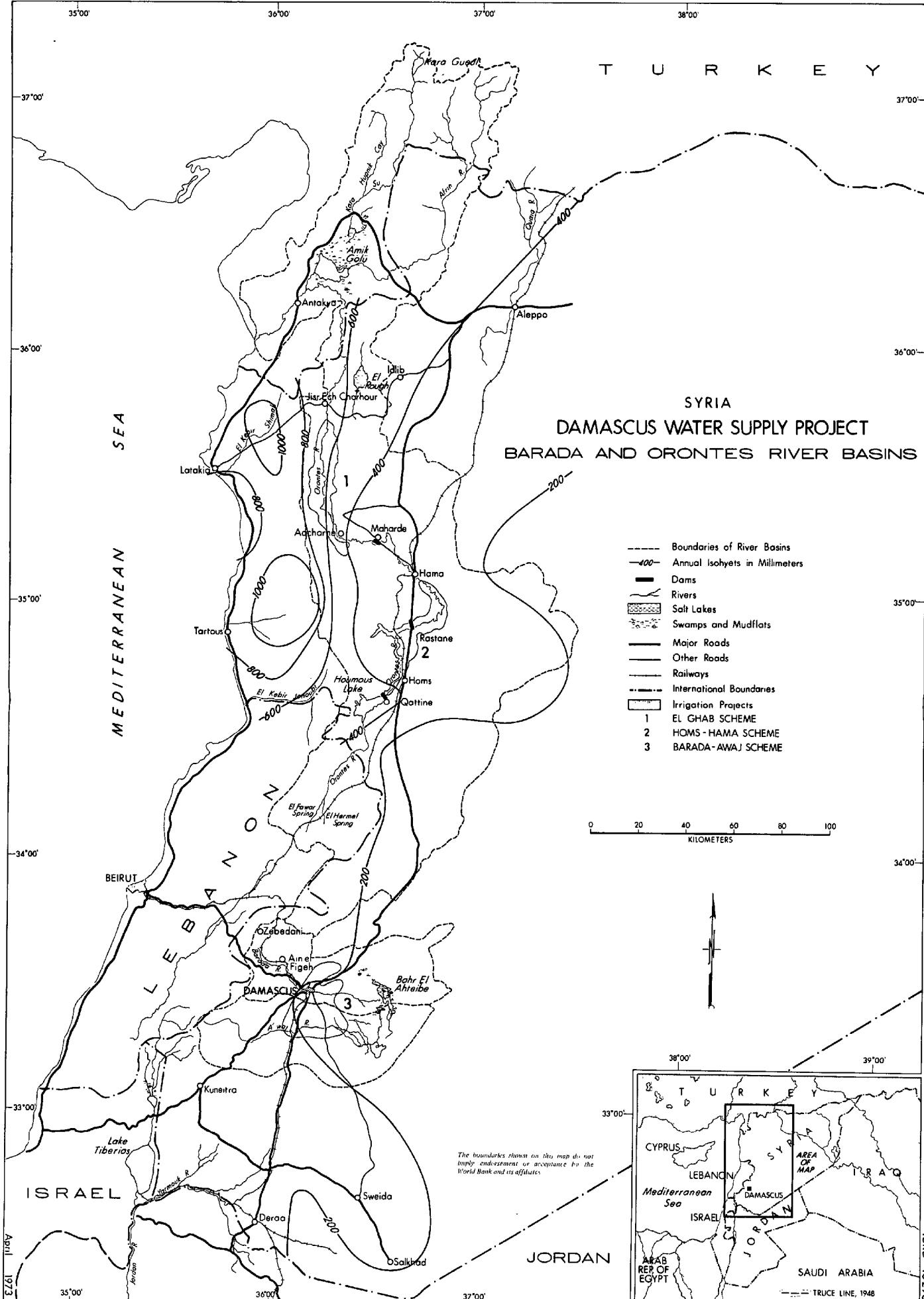
ECONOMIC RATE OF RETURN:

About 12 percent with respect to the water supply component; this rate understates the economic return on the project because benefits to public health are not fully reflected in the price assumed for the calculation.

APPRAISAL REPORT:

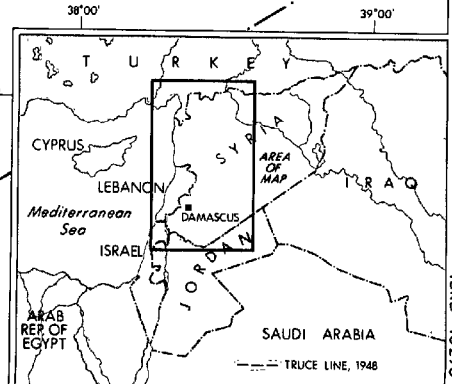
106a-SYR dated May 14, 1973





SYRIA
DAMASCUS WATER SUPPLY PROJECT
 BARADA AND ORONTES RIVER BASINS

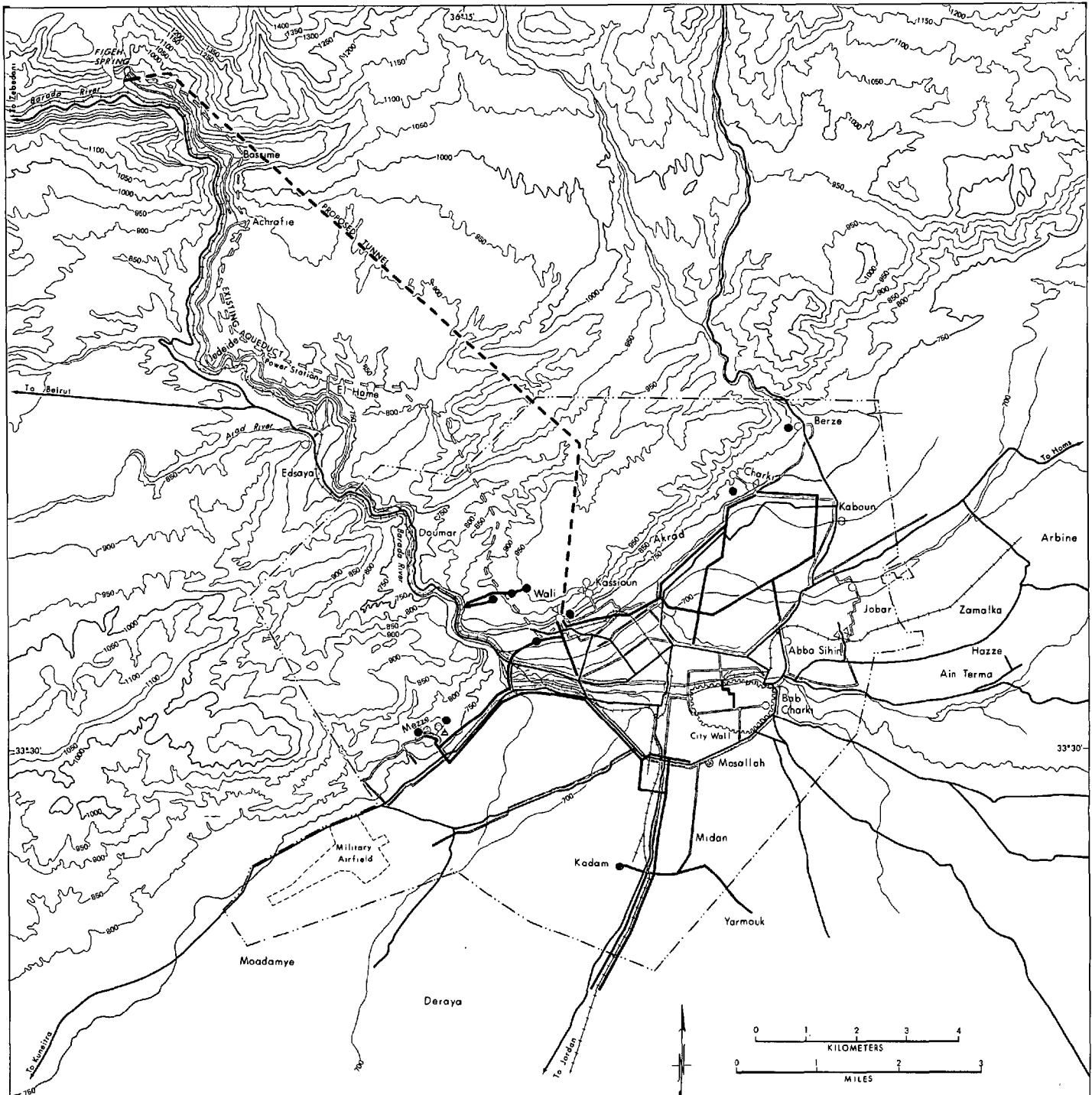
- Boundaries of River Basins
- 100--- Annual Isohyets in Millimeters
- Dams
- Rivers
- ▨ Salt Lakes
- ▨ Swamps and Mudflats
- Major Roads
- Other Roads
- Railways
- International Boundaries
- ▭ Irrigation Projects
- 1 EL GHAB SCHEME
- 2 HOMS - HAMA SCHEME
- 3 BARADA - AWAJ SCHEME



The boundaries shown on this map do not imply endorsement or acceptance by the World Bank and its affiliates.

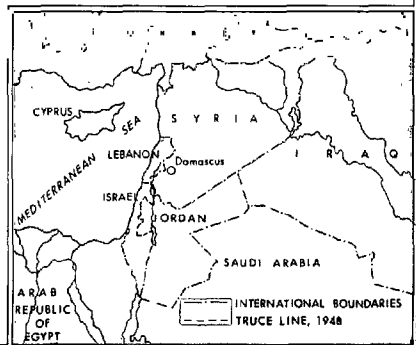
April 1973

IBRD 10296



SYRIA
 DAMASCUS WATER SUPPLY PROJECT
 METROPOLITAN AREA OF DAMASCUS

- ▲ Proposed Pumping Stations
- Proposed Reservoirs
- Proposed Water Mains
- ▲ Existing Pumping Station
- Existing Reservoirs
- Existing Water Mains
- Roads
- Railways
- Boundary of Damascus Municipality
- Contours, 50 Meter Interval



The boundaries shown on this map do not imply endorsement or acceptance by the World Bank and its affiliates.

APRIL 1973

36°15'

IBRD 10797